

REMARKS

Claims 1, 3, 4 and 6-12 are all the claims pending in the application. Reconsideration and allowance of all the claims are respectfully requested in view of the following remarks.

Amendment to Process Claims

Applicants have amended claims 1, 3, 4, and 6 so as to be process claims. The Patent Office may waive the election and permit a shift to process claims. See MPEP §819.01. Although such a shift is at the discretion of the Examiner, there is no shift where a product is elected and the Examiner holds invention to be in the process. MPEP §820. In this case the Examiner has noted that invention lies in the process. For example, the Examiner states “[I]f the invention is in how the transmission component is made, Examiner suggests that Applicant pursue claims drawn to the method of making the transmission component.”¹ Accordingly, Applicants have taken the Examiner’s suggestion and have amended claims 1, 3, 4, and 6, so as to be process claims. And because the Examiner has indicated that the invention lies in the process, there has been no shift. Accordingly, Applicants respectfully request that the Examiner permit and consider this amendment.

Claim Rejections - 35 U.S.C. § 102

The Examiner rejected claims 1, 3, 4, and 6, under §102(e) as being anticipated by US Patent 6,113,514 to Okubo et. (hereinafter Okubo). Applicants respectfully traverse this rejection because Okubo fails to disclose every element as set forth in the claims.

Claims 1 and 4 independently set forth a process of making a continuously variable transmission (CVT) component, comprising, *inter alia*, measuring, by non-destructive inspection, the size of non-metallic inclusions in a layer of a rolling member.

¹ Office Action at page 4, lines 4-6.

The use of non-destructive inspection is described at, for example, page 10, lines 2-5, and page 30, line 17, in the specification. The method of the presently claimed invention is a non-destructive inspection.

In the present invention, the defect position on raceway surface of sample 2 (a CVT input disk, for example) is detected, not in a material state but, rather, in a CVT disk itself. According to Fig. 3 and 4, for example, the CVT input disk is not in a raw-material state, but exists as a CVT disk component. Note the reference number 31.

Okubo, discloses a material having non-metallic inclusions. However, in contrast to that set forth in claims 1 and 4, Okubo does not disclose selecting the material of a CVT disk by using non-destructive inspection. Instead, Okubo discloses destructive inspection in which the non-metallic inclusions of the test piece, made from raw material, are detected.

On the other hand, measuring—by non-destructive inspection—is performed in the present invention. Measuring the non-metallic inclusions on raceway surface 2, of a sample component, is performed by an ultrasonic defect-detecting test. Note the specification at page 22, line 20 to page 23, line 5. The detection is performed, not on a raw material but, rather, on the component of the CVT itself. Then, if it is determined that the layer does not contain a non-metallic inclusion having a certain maximum diameter or more, the qualified sample is available as a finished product because non-destructive inspection has been used to measure the size of the non-metallic inclusions. Therefore, there is no waste of the qualified sample.

Accordingly, the inspection of the CVT component itself is performed more precisely than inspecting the state of a raw material, so that—more certainly—non-metallic inclusions are not included in a vicinity of the surface of the CVT component. Cracking generated from raceway surface due to bending fatigue of the CVT component or flaking due to rolling fatigue are thus effectively prevented by the inspection, as set forth in each of claims 1 and 4.

For at least any of the above reasons, claims 1 and 4 are not anticipated by Okubo. Likewise, dependent claims 3 and 6 are not anticipated by this reference.

Claim Rejections - 35 U.S.C. § 103

The Examiner rejected claims 1, 3, 4, and 6, under §103(a) as being unpatentable over US Patent 5,855,531 to Mitamura et al. (hereinafter Mitamura) in view of JP 06-287710 (hereinafter JP '710). Applicants respectfully traverse this rejection because the references fail to teach or suggest all the elements as set forth in Applicants' claims.

Again, each one of claims 1 and 4 independently sets forth a process of making a CVT component comprising, *inter alia*, measuring, by non-destructive inspection, the size of non-metallic inclusions in a layer of a rolling member.

Mitamura and JP '710 disclose non-metallic inclusions. However, in contrast to that set forth in each one of claims 1 and 4, Mitamura does not disclose measuring defects in the material of a CVT disk by using non-destructive inspection. Similarly, JP '710 does not disclose measuring the non-metallic inclusions in the material of CVT disk by using non-destructive inspection. These references instead disclose destructive inspection in order to detect the non-metallic inclusions of a test piece made from a raw material.

Accordingly, even if one of ordinary skill in the art were motivated to combine Mitamura and JP '710 as suggested by the Examiner, any such combination would still not teach or suggest measuring, by non-destructive inspection, the size of non-metallic inclusions in a layer of a CVT component, as independently set forth in each one of claims 1 and 4.

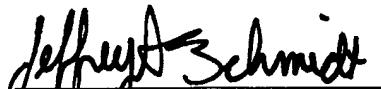
For at least any of the above reasons, claims 1 and 4 are not rendered obvious by Mitamura and JP '710. Likewise, dependent claims 3 and 6 are not rendered obvious by these references.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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